The Standards Forum

News on the DOE Technical Standards Program

Volume 8 – Number 1 – June 2000

U.S. House Hears Testimony on Implementation of Public Law 104-113

On March 15, 2000, representatives from four Federal agencies testified on the implementation and coordination of Section 12 of the National Technology Transfer and Advancement Act of 1995, also known as Public Law 104-113 (PL 104-113). Testimonies were presented by Mr. Jim Wells, Director, Energy, Resources and Science Issues, U.S. General Accounting Office, Washington, D.C.; Dr. Belinda Collins, Director, Office of Standards Services, National Institute of Standards and Technology, Washington, D.C.; Mr. Gregory E. Saunders, Director, Defense Standardization Program Office, Department of Defense, Fort Belvior, Virginia; and Mr. Richard L. Black, Director, Office of Nuclear Safety Policy and Standards, Department of Energy, Washington, D.C.

Richard L. Black
DOE Standards Executive

The testimonies were offered to the U.S. House of Representatives Subcommittee on Technology, Committee on Science, and focused on the issues experienced among the Federal agencies and departments in their efforts to conform to PL 104-113.

Chairwoman Constance A. Morella's opening comments briefly reviewed the intent of PL 104-113 to encourage the Federal Government to eliminate costly duplication of Government standards through the use of private-sector voluntary consensus standards (VCSs) whenever possible. The Chairwoman then enumerated the purposes of the hearing: to evaluate the efficacy of PL 104-113, to evaluate the efforts to coordinate the required annual agency reports to Congress, and to hear first hand from two Federal agencies on how complying with PL 104-113 has affected them.

Several issues were addressed, such as the mixed results of Agency efforts to comply with PL 104-113, potential ways to improve compliance and reporting schedules, the impact of limited resources within the Agencies, the decline in Federal participation in VCS activities, and the economic impact of PL 104-113.

The testimonies may be viewed in their entirety on the Web at: **http://www.house.gov/science/welcome.htm**.

The Savannah River Site Standards Program

Part 1 – SRS Engineering Standards

By: James McAndrews, Savannah River Site (SRS)

The SRS standards program recognizes national codes and standards as the primary standards used at SRS. But national codes and standards cannot and do not provide all the necessary information required to perform every engineering task at the site. Therefore, national codes and standards are supplemented by SRS engineering standards and SRS engineering guides. These site standards and guides provide the needed information to operate a cost-effective engineering program at the site. This article is Part 1 of a two-part series to provide information on the engineering standards and guides used at SRS. Part 1 will focus on SRS engineering standards, and Part 2 will focus on SRS engineering guides. Part 2 will be published in a later edition of *The Standards Forum*.

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INSIDE THIS ISSUE

a note from the Manager . . .

DOE Technical Standards Program

DOE Hosts TSM/ TC Meeting

The May Technical Standards Managers' Meeting was held in Washington, D.C. at the Forrestal Building. DOE's Technical Standards Managers (TSMs)—and now Topical Committee (TC) representatives—met to conduct the Technical Standards Program (TSP) business meeting and lessons-learned/continuous improvement sessions. The face-to-face meetings and interactions in facilitated sessions are critical to the success of the TSP as a service program. Headquarters, field, and contractor representatives make known their needs, identify issues, and work together to develop the procedures and processes to make the TSP work efficiently and effectively. The TSP continually evolves and improves with experience and changes in requirements and technology. By getting direct input from users and managers in an open forum, we identify key issues and forge changes to best serve DOE. The combination of "old timers," mid-termers, and newly appointed TSMs provides the ideal mixture of enthusiasm and experience that optimizes change. It's a chance to work with goal-oriented people who know that their participation can really make a difference. We hope to be able to continue in-person meetings at least once a year (down from three times a year in the past) to supplement our monthly telecons. It's critical that the people who use the TSP processes take the opportunity to discuss them with their peers in an open forum. This is one of the best guarantees of success in management, and you get to implement what you want and need.

Rick Serbu
TSP Manager

We tackled topics in the range of "difficult and vexing" to "pleasant and profitable." We were able to determine and state (i.e., grind out) that our current approach to promoting the "use" of voluntary consensus standards is appropriate for our business needs, and is widely accepted. We also developed improvements for the TSP Web Site design that we feel will better serve TSMs, standards developers, and standards users, while keeping the "flavor" of the current Web Site. The Web Site effort also gives us the opportunity to work more closely with the EH-72 Information Management folks and MA's Information Architecture Program (Carol Blackston) and the Technical Qualification Program. There was a spirited endorsement to adopt the Directives System's REVCOM as a TSP comment tracking system—it could save effort, improve documentation, promote participation, speed up reviews, and establish a single, DOE-wide system for document reviews! Plus, it enhances our active cooperation with Sue Hargrove and the Directives System Team (see the REVCOM article on Page 12 of this issue of *The Standards Forum*).

We also received support and encouragement on the program and TSM and TC involvement from Joe Fitzgerald, DAS for EH-5, and Dick Black, DOE's Standards Executive. Ron Barton (DNFSB staff) keyed on the importance of standards, and outlined the extensive involvement of the DNFSB in technical standards development and use.

It was a productive TSMC meeting. We miss the experience and dedication of departed or retired TSMs (e.g., Bernie Mlynzak, Bob Wayland, and Charlie Simpkins), but we welcome the new and enthusiastic TSMs and TC Chairs (e.g., Jill Nagode, Earl Carnes, and Carl Mazzola) to the mix. Keep an eye open for the coming positive changes to TSP operations and the TSP Web Site!

— Rick Serbu

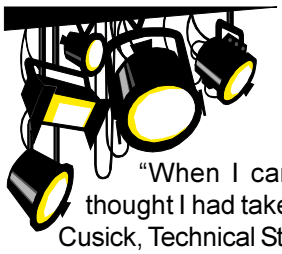
Seven Years of Service to the DOE Standards Community!

The number seven bears a certain mystique in various settings. The editor of *The Standards Forum* recently performed an Internet search on "seven years" that yielded 693,974 hits. No, not all of these sites were visited, but those that were included references to the Seven Years War, several movies, religious events, number of days in the week, and even a book about an "itch." Well, the number seven is meaningful also to those of us who have supported, written for, published, made suggestions, and otherwise contributed to *The Standards Forum* and its monthly companion, *Standards Action*, during the past seven years of service to the DOE standards community. All of these participants in the production of the newsletters have striven to provide timely, accurate, and relevant information on the Technical Standards Program as well as events happening in other technical standards venues.

The Standards Forum is, and will continue to be, a major "forum" for those involved in Federal standards activities. As a participant in Federal standards work, you are valued not only as a reader, but also as a potential contributor of articles on standards applications and approaches of interest to the DOE community. Your comments on the publication, including suggestions for improvements and topics to be covered, are also welcome.

In musical theory, the seventh tone in a major scale is known as the "leading tone" because it leads one melodically to complete the scale and give satisfaction to the tonic progression. We hope that as we finish *The Standards Forum*'s seventh year and enter into the following years, the information provided will continue to lead you forward to "melodic" successes and satisfaction in your standards efforts. Thank you for your continued interest and involvement in the newsletters and the DOE Technical Standards Program.

Technical Standards Manager Spotlight



Jennifer Hamilton Cusick
Technical Standards Manager
Oak Ridge Operations Office
Oak Ridge, Tennessee

"When I came to work for the Department, I thought I had taken one step into heaven," says Jenni Cusick, Technical Standards Manager for Oak Ridge Operations (ORO). "I was raised on a farm in Loudon County, Tennessee, and had just completed a degree in merchandising and was working in retail. Very hard work and very little pay, so when I came to work for DOE (ERDA then), I really felt like I had a chance at a good career. My life up until then had been rather diversified—starting out in music and then changing to merchandising was hardly what the government wanted—but I got my foot in the door. Soon I learned more was needed and went back for a degree in Business Administration at night. This got my career moving."

"There is a definite progression of improvements in the Department's changing technical standards approaches—from strict adherence to certain policies to giving choices to our contractors on ways that they can accomplish their tasks, allowing them the opportunity to do their jobs easier and with higher quality results."

In 1987 Jenni joined the Directives/Training Team at ORO as a Management Analyst in the Human Resources Division. Along with one other person, she was responsible for coordinating all of the directives actions and training and development. "At that time it was a very heavy but manageable workload. We wrote all supplemental directives for ORO and coordinated the reviews on Headquarters drafts while also bringing in training classes and coordinating all of that area, too."

"We have 'morphed' from very small in scope to an organization that impacts all of our contractors tremendously," Jenni told *The Standards Forum*. The two-member team of 1987–91 grew into the Directives Management Group (DMG) in 1992, and at one time had 19 staff members. Standards/Requirements Identification Documents (S/RIDs) were in the beginning stages and databases were being developed to track them. Contractual requirements were also changing with the incorporation of what is now called the "laws clause" of the Department of Energy Acquisition Regulation, so the work load was tremendous. Jenni worked through all those changes and saw many more come about with the changes from S/RIDs, to Necessary and Sufficient, and now to Work Smart Standards (WSS). "This was all very eye-opening to me—to think that a small group of two could grow into something so large and with so much impact."

Jenni believes the technical standards incorporated into all these different stages of regulations have allowed contractors to be more flexible, less scrutinized, and more efficient. "There is a definite progression of improvements in the Department's changing technical standards approaches—from strict adherence to certain policies to giving choices to our contractors on ways that they can accomplish their tasks, allowing them the opportunity to do their jobs easier and with higher quality results," she observes.

The DMG at ORO is an integral part of the overall operations office mission. The DMG has worked in the development of all three of the ORO Functions, Responsibilities, and Authorities Manuals, which evolved from focusing on only one building at the Y-12 Plant to incorporating all programs into a plant-wide manual. The ORO Complex is very diverse with a broad range of programs, but the DMG is involved in all areas, including integrated safety management, the Price Anderson Amendment Act, delegations of authority, implementation planning for contractors, baselining contractual documents and requirements for all the ORO M&O/M&I contractors, S/RIDs and WSS, reviewing all draft directives and technical standards, tracking and preparing databases for all that information, maintaining one of the largest historical directives libraries within the Department, and the newest responsibility of coordinating the onslaught of Field Management Council actions. "We never get any rest in our organization. The down times are limited to minutes," Jenni said.

Jenni has been the ORO Technical Standards Manager since 1999, but she has been involved in the program far longer. The standards management program at ORO is a very good program that has grown substantially the last few years. "The DMG is an organization that I am very proud to be a part of, and one thing about it, you never get bored. The 24 years I have been with the Department have been quite an experience. I have grown a lot and been able to establish a good career working with all kinds of people and I have been able to stay close to my home that I love," Jenni said.

An avid flower gardener, music lover, and sports enthusiast, Jenni is much involved with her three children's activities. She relates, "They are involved in many sports and musical events, and I love them all! After traveling the last two summers with my husband and children to Wyoming and Canada, I can truly say the hills of Tennessee are the most beautiful. The lush greenery we have here cannot be beaten." So says a girl from East Tennessee who still chooses to live on the farm where she was raised.

▸▸SRS Standards Program (Continued from Page 1)

SRS Engineering Standards

SRS engineering standards were developed for use at SRS for subject matter that is not contained in national codes and standards, to address unique site requirements, applications, or configurations. The SRS engineering standards are reviewed every two years for content and are revised or deleted based on the information available in the private sector.

SRS has recently developed two new standards that provide good examples for the occasional need for site standards where the subject matter is not available in national codes and standards. They are listed below.

1. **Standard Number 01101, Rev. 0, *Use of Listed Equipment & Components for Safety Applications***

   This standard was developed because of the need to economically purchase equipment and commodities such as electrical conduit for installation in Safety Class systems. The electrical conduit either had to be procured Level 1[1] using an ANSI/ASME NQA-1 qualified vendor or procured Level 2 and then have the item go through a Commercial Grade Dedication (CGD) process. Buying such equipment and commodities Level 1 was not an option, as the cost to implement ANSI/ASME NQA-1 qualifications on the vendors was cost prohibitive. The CGD process was also costly, as it required engineering time to document, review, inspect, or test before the commodity was approved for the Safety Class application. The new standard provides the requirements to allow for the use of Level 2-procured equipment and components for Safety Class (SC) applications, without the CGD process, when the equipment or components are Underwriters Laboratories (UL) listed or Factory Mutual (FM) approved.

2. **Standard Number 15888, Rev. 0, *HEPA Filter Requirements***

   This standard was developed to resolve some of the issues raised in DNFSB/Tech 23 Report, "DOE HEPA Filter Program Infrastructure." The standard provides requirements not covered in national codes and standards for High Efficiency Particulate Air (HEPA) filters used at SRS for radioactive and asbestos services. It provides requirements which include the procurement, testing, handling and storage, inspection, installation, shelf life and total life of the HEPA filter component.

The following list presents the remaining SRS engineering standards and a description of their purpose and scope. Copies of the standards can be accessed through the SRS sites electronic system (Shrine) or by contacting the Westinghouse Savannah River Company (WSRC) TSM, Art Blanchard, 803-952-7209, **arthur.blanchard@srs.gov**, or the WSRC Alternate TSM, Jim McAndrews, 803-952-8099, **james.mcandrews@srs.gov**.

[1] The procurement system at SRS provides a graded approach consisting of three levels of control as follows:
Procurement Level 1 — highest level control (NQA-1)
Procurement Level 2 — intermediate level of control
Procurement Level 3 — lowest level of control

Standard Number 01060, Rev. 4, *SRS Structural Design Criteria*

This document provides minimum structural design criteria for all new facilities and modifications to existing facilities, both permanent and temporary, at the SRS.

Standard Number 01065, Rev. 0, *Strong Motion Seismic Monitoring Instrumentation for SRS*

This standard establishes the functional requirements and performance criteria for strong motion seismic monitoring instrumentation used to detect and record the occurrence and severity of seismic events at SRS, as required by DOE Order 420.1, *Facility Safety*, Section 4.4.5.

Standard Number 01110, Rev. 2, *Civil Site Design Criteria*

This document delineates the site-specific civil design criteria to be used for all new facilities and notifications to existing facilities at SRS and meets the criteria stipulated in DOE Order 420.1, Section 2.1, and where that listing approval satisfies the Safety Class requirements.

Standard Number 01120, Rev. 2, *SRS Fire Protection Design Criteria*

This engineering standard provides minimum design criteria for all new and modified fire protection system equipment in facilities at SRS. Included are additional site-specific requirements with regards to Fire Protection and Life Safety that are not specified in or are included as an option in the National Fire Code (NFC) published by the National Fire Protection Association (NFPA).

Standard Number 01703, Rev. 0, *Application of ISA S84.01 for SRS Non-Reactor Facilities*

This standard provides the method for the application of ISA S84.01 at SRS. It applies only to systems that (1) have a functional classification of safety significant or have been identified per 29 CFR 1910.119 as independent protection layers for hazardous chemical processes and (2) require instrumented systems to fulfill the system function.

Standard Number 01709, Rev. 0, *Color Conventions for Process Displays*

This standard establishes the color conventions to be used to display process status indication on both hardwired panels and computer graphic displays.

Standard Number 05951, Rev. 1, *Corrosion Evaluation: Stainless Steels and other corrosion Resisting Alloys*

This document provides requirements for the corrosion evaluation of certain stainless steels and other corrosion resisting alloys intended for services where intergranular corrosion must be minimized.

Standard Number 05952, Rev. 1, *Required Practices to Minimize Chloride Induced Stress Corrosion Cracking of Type 300 Series Austenitic Stainless Steel*

This document describes conditions that can cause chloride induced stress corrosion cracking of wrought and/or cast Type 300 series austenitic stainless steels, specifies practices to avoid the problem, and includes restrictions on the use of chloride-bearing nonmetallic materials that commonly contact stainless steel components during fabrication, testing, shipment, storage, or while in service.

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SRS Standards Program (Continued from Page 4)

Standard Number 07270, Rev. 2, *Installation and Inspection of Penetration Seals*

This standard provides the requirements for installation, repair, inspection and documentation of penetration seals. It is the intent of this standard to be used as a "cook book" for selection of appropriate selection of seals by Design Agencies in the development of design documents and by construction.

Standard Number 13096, Rev 2, *Field Installation of Nuclear Incident Monitors*

This standard provides details for installation of Nuclear Incident Monitors (NIMs) and associated remote alarms and chambers at SRS.

Standard Number 15060, Rev. 4, *ASME B31.3, Additional Requirements for SRS Piping Systems*

This standard provides additional SRS specific criteria above the minimum requirements provided in the ASME B31.3 Piping Code to address piping systems specific to SRS. The SRS conditions that are beyond the scope of ASME B31.3 include:

– Material Requirements,

– Radioactive Fluid Service,

– Safety Class and Safety Significant Piping Systems,

– Repairs and Alterations to Inservice Piping Systems, and

– Federal Facility Agreement Requirements.

Standard Number 15980, Rev. 2, *Mechanical Installation of Safety Class and Safety Significant Instrumentation*

This standard provides technical requirements for the mechanical installation of field installed instrumentation and associated sensing lines for Safety Class and Safety Significant systems.

Standard Number 16050, Rev. 2, *SRS Electrical Design Criteria*

This standard specifies the minimum requirements for vertical and horizontal clearances between aerial electrical lines and other aerial electrical lines, plant structures, and equipment; wooden crossarms used in the construction of aerial electric lines; lightning protection of aerial lines and equipment; grounding electrodes and grids; minimum easements and right-of -ways around electric lines and equipment; joint use of electric utility poles; grade of construction for 13.8 kV lines; and excavations near electric utility poles and anchors.

Standard Number 16055, Rev. 0, *Telecommunications*

This document provides minimum telecommunications design criteria for all new facilities and modifications to existing facilities, both permanent and temporary, at SRS. This document applies to site-wide voice, data, and video transmission.

(To Be Continued in the Next Issue of *The Standards Forum*)

Some Pointers on Enhancing Accuracy and Turnaround Time in the Production of Your DOE Technical Standards

The Technical Standards Program Office (TSPO) has sometimes experienced considerable delay and difficulty in preparing camera-ready publication and Internet versions of technical standards from the electronic files supplied by the Preparing Activities (PAs). The preparation of the final document by TSPO will be greatly facilitated and document accuracy will be optimized if the PA is careful to use consistent font types and sizes in the various portions of the electronic file (i.e., the body, headers, section titles, footers, etc.). In addition, it is much easier to produce Portable Document Format (PDF) files when a commonly used font, such as Arial or Times New Roman, is used throughout the document. Refer to the TSP Style Guide (**http://tis.eh.doe.gov/techstds/tspofram.html**), page 2, for more information.

American Society for Quality Offers New Course

"How to Transition to ISO 9000:2000" is a new two-day course offered by the American Society for Quality (ASQ). The course, which is geared for quality professionals with an understanding of ISO 9001:1994, will explain changes brought about by the 2000 revision. Quality trainers, technicians, engineers, managers, internal and external quality auditors, or anyone whose work is impacted by the ISO 9000 standard revisions will benefit from this course. The course offers the opportunity to understand the differences between ISO 9001:1994 and the new version; assess the impact of the changes on your organization; and discover the most resourceful, orderly, and economical ways to implement the changes. Course dates are June 20–21, 2000, in San Diego, California.

For more information check out **http://www.asq.org/news/news_releases/022100isocourse.html**.

Standards Actions

Technical Standards Program Document Status (2000-05-22)

Activity Summary

In Conversion – 4

In Preparation – 32

Out for Comment – 16

Published this Month – 1

5-year Reviews

In Revision – 3

In Reaffirmation – 1

To be Superseded – 6

Cancellations Pending – 9

Cancellations in Progress – 1

No Current Action – 12

DOE Technical Standard Recently Published

The following DOE document has recently been published:

- DOE-STD-4001-2000, *Design Criteria Standard for Electronic Records Management Software Applications*, March 2000.

DOE employees and DOE contractors may obtain copies from the ES&H Technical Information Services, U.S. Department of Energy; telephone 1-800-473-4375 or Fax 301-903-9823.

Subcontractors and the general public may obtain copies from the U.S. Department of Commerce, Technology Administration, National Technical Information Service, Springfield, Virginia 22161; telephone 703-605-6000 or Fax 703-605-6900.

Copies of DOE Technical Standards (i.e., DOE Standards, Specifications, Handbooks, and Technical Standards Lists) are also available on the TSP Web Site, **http://tis.eh.doe.gov/techstds/**.

Non-Government Standards

American National Standards Institute

The American National Standards Institute (ANSI) publishes coordination activities of non-Government standards (NGS) biweekly in *ANSI Standards Action.* Recent electronic copies (no hardcopies are produced) are available on the ANSI Web site at **http://web.ansi.org/rooms/room_14/**. Electronic back copies are available to ANSI members only. For information on site membership, ask your local ANSI contact. For information on individual or group ANSI membership, call Susan Bose at 212-642-4948, e-mail **sbose@ansi.org**.

Hardcopy versions of published non-Government standards listed in this section may be obtained from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado, 80112, 800-854-7179, Fax 303-397-2740, **global@ihs.com**, **http://global .ihs.com**. Electronic delivery of selected documents is available through ANSI at **http://webstore.ansi.org**. Copies of the listed draft standards and the procedure for commenting on the same may be obtained by contacting the standards developing organization.

The following listings are extracted from *ANSI Standards Action* and are representative of NGS development activities that may be relevant to DOE operations. Refer to *ANSI Standards Action* for a more extensive listing of changes and new publications, standards developing organizations, and additional information about submitting comments. Additional information on ANSI activities and available non-Government standards can be found on the ANSI Web site, **http://www.ansi.org**, or through the National Standards System Network, **http://www.nssn.org**.

The following American National Standards are currently in coordination (comment due dates follow each entry)**:**

- ASME B40.4, *Filled System Thermometers* (new standard) - July 18, 2000.
- ASME B40.9, *Thermowells* (new standard) - July 18, 2000.
- ASME NQA-1b-2000, *Quality Assurance Requirements for Nuclear Facility Applications* (revision of ANSI/ASME NQA-1-1997) - June 19, 2000.
- EIA SP-4533 (if approved, to be published as ANSI/EIA 832), *Process Improvement Guidelines* (new standard) - June 19, 2000.
- IEEE 286-2000, *Recommended Practice for Measurement of Power Factor Tip-Up of Electric Machinery Stator Coil Insulation* (new standard) - June 19, 2000.
- IEEE 937-2000, *Recommended Practice for Installation and Maintenance of Lead-Acid Batteries for Photovoltaic (PV) Systems* [revision of ANSI/IEEE 937-1987 (R1993)] - June 19, 2000.

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Standards Actions (Continued from Previous Page)

- IEEE 1115-2000, *Recommended Practice for Sizing Nickel-Cadmium Batteries for Stationary Applications* (revision of ANSI/IEEE 1115-1993) - June 19, 2000.
- IEEE 1205-2000, *Guide for Assessing, Monitoring, and Mitigating Aging Effects on Class 1E Equipment Used in Nuclear Power Generating Stations* (revision of ANSI/IEEE 1205-1993) - June 19, 2000.
- IEEE 1515-2000, *Recommended Practice for Electronic Power Subsystems: Parameter Definitions, Test Conditions, and Test Methods* (new standard) - June 19, 2000.
- HI 9.6.2-2000, *Centrifugal and Vertical Pumps for Allowable Nozzle Loads* (new standard) - June 19, 2000.
- UL 346, *Standard for Safety for Waterflow Indicators for Fire Protective Signaling Systems* (revision of ANSI/UL 346-1995) - July 18, 2000.
- UL 555S, *Standard for Safety for Smoke Dampers* (new standard) - July 18, 2000.

The following American National Standards have been approved for publication: (Publication is to take place within six months following the date shown. Publication status and ordering information may be obtained from ANSI's Customer Service at 212-642-4900.)

- ANSI/AISI/CFSSPEC-1996, *1996 Specification for the Design of Cold-Formed Steel Structural Members* (new standard) - April 7, 2000.
- ANSI/ASHRAE 149-2000, *Laboratory Methods of Testing Fans Used to Exhaust Smoke in Smoke Management Systems* (new standard) - April 25, 2000.
- ANSI/AWS B5.9-2000, *Specification for Qualification of Welding Supervisor* (new standard) - April 13, 2000.
- ANSI/MSE 2000-2000, *A Management System for Energy* (new standard) - April 6, 2000.
- ANSI/NIRMA CM 1.0-2000, *Configuration Management for Nuclear Facilities* (new standard) - April 6, 2000.
- ANSI/SAE J82-MAY98, *Mechanical and Quality Requirements for Machine Screws* (new standard) - April 5, 2000.
- ANSI/SAE J423-FEB98, *Methods of Measuring Case Depth* (new standard) - April 5, 2000.
- ANSI/SAE JA1000-JUN98, *Reliability Program Standard* (new standard) - April 5, 2000.
- ANSI/UL 486E-2000, *Standard for Safety for Equipment Wiring Terminals for Use with Aluminum and/or Copper Conductors* (revision of ANSI/UL 486E-1994) - April 7, 2000.
- ANSI Z21.47b-2000, *Gas-Fired Central Furnaces* (same as CSA 2.3b) (supplement to ANSI Z21.47-1998) - April 4, 2000.

The following international standards are currently in coordination (comment due dates follow each entry)**:**

- EN 77-1:1999/prA1, *Multi-burner gas-fired overhead radiant tube heater systems for non-domestic use - Part 1: System D, safety* - August 9, 2000.
- EN 777-4:1999/prA1, *Multi-burner gas-fired overhead radiant tube heater systems for non-domestic use - Part 4: System H safety* - August 9, 2000.
- EN 795:1996/prA1, *Protection against falls from a height - Anchor devices - Requirements and testing* - June 17, 2000.
- ISO/DIS 12100-1, *Safety of machinery - Basic concepts and general principles for design - Part 1: Basic terminology and methodology* - July 15, 2000.
- ISO/DIS 14015, *Environmental management - Environmental assessment of sites and organizations* (EASO) - July 29, 2000.
- ISO/DIS 14723, *Petroleum and natural gas industries - Pipeline transportation systems - Subsea pipeline valves* - July 15, 2000.
- prEN 81-1:1998/prA1, *Safety rules for the construction and installation of lifts - Part 1: Electric lifts* - September 13, 2000.
- prEN 81-2:1998/prA1, *Safety rules for the construction and installation of lifts - Part 2: Hydraulic lifts* - September 13, 2000.
- prEN 292-1 REVIEW, *Safety of machinery - Basic concepts and general principles for design - Part 1: Basic terminology and methodology* (Identical with ISO/DIS 12100-1:2000) Revision of EN 292-1:1991 - August 13, 2000.
- prEN 334:1999/prA1, *Gas pressure regulators for inlet pressures up to 100 bar* - June 9, 2000.
- prEN 659 REVIEW, *Protective gloves for firefighters* - July 17, 2000.
- prEN 730-1, *Gas welding equipment - Safety devices - Part 1: Incorporating a flame (flashback) arrestor* - July 17, 2000.
- prEN 1504-4, *Products and systems for the protection and repair of concrete structures - Definitions, requirements, quality control and evaluation of conformity - Part 4: Structural bonding* - September 13, 2000.
- prEN 1745, *Masonry and masonry products - Methods for determining design thermal values* (for information).
- prEN 1822-5, *High efficiency particulate air filters (HEPA and ULPA) - Part 5: Testing the efficiency of the filter element* (for information).
- prEN 1877-1, *Products and systems for the protection and repair of concrete structures - Test methods - Reactive functions related to epoxy resins - Part 1: Determination of epoxy equivalent* (for information).
- prEN 10028-3 REVIEW, *Flat products made of steels for pressure purposes - Part 3: Weldable fine grain steels, normalized* - August 9, 2000.
- prEN 12567, *Industrial valve - Isolating valves for LNG - Specification for suitability and appropriate verification tests* (for information).
- prEN 12952-5, *Water tube boilers and auxiliary installations - Part 5: Workmanship and construction of pressure parts of the boiler* (for information).
- prEN 13084-1, *Free-standing industrial chimneys - Part 1: General requirements* (for information).
- prEN 13861, *Safety of machinery - Guidance for the application of ergonomics standards in the design of machinery and for the drafting of ergonomics clauses in standards* - August 9, 2000.
- prEN ISO10289, *Methods for corrosion testing of metallic and other inorganic coatings on metallic substrates - Rating of test specimens and manufactured articles subjected to corrosion tests* (ISO 10289:1999) - September 13, 2000.
- prEN ISO 12567, *Thermal performance of windows and doors - Determination of thermal transmittance by hot box method* (ISO/FDIS 12567:2000) (for information).

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Standards Actions (Continued from Previous Page)

- prEN ISO 14520-1, *Gaseous fire-extinguishing systems - Physical properties and system design - Part 1: General requirements* (ISO/FDIS 14520-1:2000) (for information).
- prEN ISO 14577-1, *Metallic materials - Instrumented indentation test for hardness and materials parameters - Part 1: Test method* (ISO/DIS 14577-1:2000) - August 13, 2000.

The following newly published international standards are available:

- IEC 60079-0-am1-2000, Ed. 3.0, *Electrical apparatus for explosive gas atmospheres - Part 0: General requirements.*
- IEC 61346-2-2000, Ed. 1.0, *Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 2: Classification of objects and codes for classes.*
- IEC 61508-6-2000, Ed.1.0, *Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 6: Guidelines on the application of IEC 61508-2 and IEC 61508-3.*
- ISO 4309:1990, *Cranes - Wire ropes - Code of practice for examination and discard.*

American National Standards Projects Initiated

The following is a list of proposed new American National Standards or revisions to existing American National Standards submitted to ANSI by accredited standards developers. DOE employees or contractors interested in participating in these activities should contact the appropriate standards developing organization. DOE-TSL-4 lists the DOE representatives on NGS committees. If no DOE representative is listed, contact the TSPO for information on participating in NGS activities.

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
Office: 1791 Tullie Circle, N.E.
Atlanta, GA 30329
Fax: 404-321-5478
Contact: Claire Ramspeck, **cramspeck@ashrae.org**

- ASHRAE 110, *Method of Testing Performance of Laboratory Fume Hoods* (revision of ANSI/ASHRAE 110-1995).

American Welding Society
Office: 550 N.W. LeJeune Road
Miami, FL 33126
Fax: 305-443-5951
Contact: Williams Oates, **boates@aws.org**

- AWS A5.21:200X, *Specification for Bare Electrodes and Rods for Surfacing* (new standard).
- AWS A10.2:200X, *Recommended Practices for Calibration of Devices for Welding Force Measurement* (new standard).
- AWS C4.2-200X, *Recommended Practices for Safe Oxyfuel Gas Cutting Operation* (new standard).

American Society for Testing and Materials

Standards activities of the American Society for Testing and Materials (ASTM) are published monthly in ASTM *Standardization News.* Orders for subscriptions or single copies of ASTM *Standardization News* may be submitted to ASTM, Subscription Dept.-SN, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959. For information regarding ASTM membership, contact the Membership Services Department at 610-832-9691 (Fax 610-832-9667). ASTM publications may be ordered from the ASTM Customer Services Department at 610-832-9585 (Fax 610-832-9555). Comments on listed draft standards may be submitted by contacting the ASTM Standards Coordination Department at the above address. Questions may be addressed to the Technical Committee Operations Division at 610-832-9672 (Fax 610-832-9666). Additional information on ASTM activities is available on the ASTM Web site (**http://www.astm.org**). The following listings are extracted from ASTM *Standardization News* and are representative of NGS development activities that may be relevant to DOE operations.

The following ASTM standards are currently in coordination:
(the due date for all items is June 10, 2000).

- New Standard, *Guide for Design, Fabrication, and Installation of Nuclear Fuel Dissolution Facilities* [Formerly C 1062-86(1990)].
- New Standard, *Test Method for Measurement of 235 U Fraction Using the Enrichment Meter Principle* (Ref. Z0074Z).
- New Standard, *Guide for Use of High Solids Content Cold Liquid-Applied Elastomeric Waterproofing Membrane on Vertical Surfaces* (Ref. Z1236Z).
- New Standard, *Guide for the Application of Spray Applied Polyurethane Foam and Coatings Over Existing Roofing Systems* (Ref. Z2480Z).
- New Standard, *Guide for Selection of Purging and Sampling Devices for Ground-Water Monitoring Wells* (Ref. Z3754Z).
- New Standard, *Guide for Comparison of Techniques to Quantify the Soil-Water (Moisture) Flux* (Ref. Z4057Z).
- New Standard, *Specification for Aluminum Pigmented Emulsified Asphalt Used as a Protective Coating for Roofing* (Ref. Z4114Z).
- New Standard, *Test Method for Determining Connection Strength Between Geosynthetic Reinforcement and Segmental Concrete Units* (Ref. Z4278Z).
- New Standard, *Test Method for the Radiochemical Determination of Uranium Isotopes in Urine by Alpha Spectrometry* (Ref. Z5165Z).
- New Standard, *Guide for Field Filtration of Ground-Water Samples* (Ref. Z6215Z).
- New Standard, *Test Method for Determination of Water (Moisture) Content, in Soil by the Time-Domain Reflectometry (TDR) Method* (Ref. Z6363Z).
- New Standard, *Test Method for Determining Tensile Properties of Geogrids by the Single or Multi-Rib Tensile Method* (Ref. Z6444Z).
- New Standard, *Practice for Dosimetry for a Self-Contained Dry Source Irradiator* (Ref. Z6807Z).
- New Standard, *Practice for Obtaining the Flexural Load-Deflection Curve of Fiber-Reinforced Concrete* (Ref. Z6819Z).
- New Standard, *Guide for Testing Industrial Protective Coatings* (Ref. Z6870Z).
- New Standard, *Specification for Liquid Applied Silicone Coating Used, in Spray Polyurethane Foam Roofing* (Ref. Z7105Z).
- New Standard, *Test Method for Obtaining and Testing Drilled Cores and Sawed Beams or Cubes of Shotcrete* (Ref. Z7115Z).
- New Standard, *Test Method for Air Content of Freshly Mixed Concrete by the Mini Volumetric Method* (Ref. Z7117Z).
- New Standard, *Guide for Application of Fully-Adhered Hot-Applied Built-up Reinforced Waterproofing Systems* (Ref. Z7475Z).

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Standards Actions (Continued from Previous Page)

- New Standard, *Test Method for Analysis of Isotopic Composition of Uranium, in Nuclear-Grade Fuel Material by Quadrupole Inductively Coupled Plasma-Mass Spectrometry* (Ref. Z7686Z).
- New Standard, *Guide for Planning, Carrying Out, and Reporting Traceable Chemical Analyses of Water Samples* (Ref. Z7842Z).
- New Standard, *Test Method for Radiochemical Determination of Strontium-90 in Soil* (Ref. Z8034Z).
- New Standard, *Test Methods for Laboratory Determination of the Density (Unit Weight) of Soil Specimens* (Ref. Z8044Z).
- C 114-99, *Test Methods for Chemical Analysis of Hydraulic Cement* (revised standard).
- C 125-00, *Terminology Relating to Concrete and Concrete Aggregates* (revised standard).
- C 150-00, *Specification for Portland Cement* (revised standard).
- C 219-99a, *Terminology Relating to Hydraulic Cement* (revised standard).
- C 666-97 (Includes change in designation number), *Test Method for Resistance of Concrete to Rapid Freezing and Thawing* (revised standard).
- C 717-99, *Terminology of Building Seals and Sealants* (revised standard).
- C 1064/C 1064M-99, *Test Method for Temperature of Freshly Mixed Portland Cement Concrete* (revised standard).
- C 1180-99, *Terminology of Mortar and Grout for Unit Masonry* (revised standard).
- D 1079-00, *Terminology Relating to Roofing, Waterproofing, and Bituminous Materials* (revised standard).
- D 4439-00, *Terminology for Geosynthetics* (revised standard).
- D 5504-98 (Includes change to title), *Test Method for Determination of Sulfur Compounds, in Natural Gas and Gaseous US Fuels by Gas Chromatography and Chemiluminescence Detection* (revised standard).

The following newly published standards are available from ASTM:

- A 380-99, *Practice for Cleaning, Descaling, and Passivation of Stainless Steel Parts, Equipment, and Systems* (revised standard).
- A 886/A 886M-99, *Specification for Steel Strand, Indented, Seven-Wire Stress-Relieved for Prestressed Concrete* (revised standard).
- A 1004-99, *Practice for Establishing Conformance to the Minimum Expected Corrosion Characteristics of Metallic, Painted-Metallic, and Non-Metallic Coated Steel Sheet Intended for Use as Cold Formed* (new standard).
- C 634-99a, *Terminology Relating to Environmental Acoustics* (revised standard).
- C 1452-00, *Specification for Reinforced Autoclaved Aerated Concrete Elements* (new standard).
- C 1454-00, *Guide for Pyrophoricity/Combustibility Testing in Support of Pyrophoricity Analyses of Metallic Uranium Spent Nuclear Fuel* (new standard).
- C 1456-00, *Test Method for the Determination of Uranium or Gadolinium, or Both, in Gadolinium Oxide-Uranium Oxide Pellets or by X-Ray Fluorescence (XRF)* (new standard).
- C 1457-00, *Test Method for Determination of Total Hydrogen Content of Uranium Oxide Powders and Pellets by Carrier Gas Extraction* (new standard).
- D 6460-99, *Test Method for Determination of Erosion Control Blanket (ECB) Performance in Protecting Earthen Channels From Stormwater-Induced Erosion* (new standard).
- D 6473-99, *Test Method for Specific Gravity and Absorption of Rock for Erosion Control* (new standard).
- D 6480-99, *Test Method for Wipe Sampling of Surfaces, Indirect Preparation, and Analysis for Asbestos Structure Number Concentration by Transmission Electron Microscopy* (new standard).
- D 6482-99, *Test Method for Determination of Cooling Characteristics of Aqueous Polymer Quenchants by Cooling Curve Analysis with Agitation Tensi Method* (new standard).
- D 6494-99, *Test Method for Determination of Asphalt Fume Particulate Matter in Workplace Atmospheres as Benzene Soluble Fraction* (new standard).
- D 6497-99, *Guide for Mechanical Attachment of Geomembrane to Penetrations or Structures* (new standard).
- D 6502-99, *Test Method for On-Line Measurement of Low Level Particulate and Dissolved Metals in Water by X-Ray Fluorescence (XRF)* (new standard).
- D 6506-00, *Specification for Asphalt Based Protection Board for Below-Grade Waterproofing* (new standard).
- D 6510-00, *Guide for Selection of Asphalt Used in Built-Up Roofing Systems* (new standard).
- E 119-00, *Test Methods for Fire Tests of Building Construction and Materials* (revised standard).
- E 2055-99, *Practice for Referencing, Test Methods for Chemical Analysis of Metals and Related Materials* (new standard).

Comments, Questions, and Addresses

Comments: If you have any questions or comments, please contact Rick Serbu, EH-31, Manager, DOE Technical Standards Program Office (TSPO), 301-903-2856, Fax 301-903-6172, e-mail **Richard.Serbu@eh.doe.gov**.

Addresses: *Standards Actions* and *The Standards Forum* are now being published electronically and will be available only via your access to the TSP Web Site (**http://tis.eh.doe.gov/techstds/**). However, we would like to maintain both our e-mail and surface mail distribution lists so that we can send you special notices concerning technical standards and the DOE Technical Standards Program. Although we may currently have your surface mail address, we have e-mail addresses for only a few of you. We are requesting that those of you who are interested in receiving special notices please contact Marty Marchbanks, ORNL, 865-241-3658, Fax 865-574-0382, **marchbanksmf@ornl.gov,** and give him your updated e-mail and surface mail addresses.

Technical Standards Activities: The TSPO would like to be kept informed of the status of technical standards that are being prepared or coordinated for DOE. Please provide this information to the TSPO at 865-576-2395, e-mail **bushar@ornl.gov**.

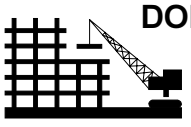
Topical Committee Developments

There are currently 24 registered DOE Topical Committees in varying states of activity. Ten are active and functioning to support various DOE missions. The Accreditation and Metrology, Biota Dose Assessment, Construction and Hoisting and Rigging, Meteorology, Fire Protection, Quality and Safety Management SIG, and DOE Contractors Supplier Quality Information Group (SQIG) have agendas rich in standards-related activities. A newly-formed Procedures Topical Committee is committed so heavily to standards projects that a spokesperson for the Committee addressed the May 9–10, 2000, TSMC meeting separately.

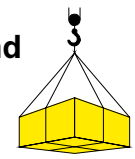
Eight topical committees are relatively inactive due to leadership changes, reorganizations, or mission inactivity. The Behavioral Safety and Human Factors/Ergonomics, Chemical Safety, Environmental Management Systems, Explosive Safety and Pressure System Safety, Industrial Hygiene Coordinating, and Nuclear Safety Training Committees reported minimal standards development activity in a survey for the latest TSMC meeting. Environmental Management Systems and Industrial Hygiene Coordination Committees have busy agendas indirectly applicable to technical standards. The Chemical Safety Committee leadership is in transition; its point of contact is on several months of military leave. The Nuclear Safety Training Committee is functioning as a one-man operation committee and a supporting discussion group.

Four topical committees have not fit in well as functioning TCs. The Emergency Management SIG, Industrial Hygiene/Occupational Safety SIG, Occurrence Reporting SIG, and Performance-Based Management SIG are former training groups in the TRADE organization at Oak Ridge that were swept into topical committees with the initial dozen committees. The Industrial Hygiene/Occupational Safety SIG and the Occurrence Reporting SIG are repositories of technical information in their particular subject areas although not currently active in technical standards development.

The remaining two topical committees are essentially non-functioning due to budget trauma and reorganization. The Backup Power Working Group Committee, once very active in defense programs, remains available to function as a focal point for technical standards activity in its area of expertise but lacks the financial support to function as a working group. The Packaging and Transportation SIG have been reorganized out of existence with Headquarters staff scattered to the Albuquerque and Nevada operations offices.



DOE Hoisting & Rigging and Construction Safety Committees Meet in Albuquerque



*By: Patrick F. Finn, Chair, Hoisting and Rigging Technical Advisory Committee (301-903-9876; **Pat.Finn@eh.doe.gov**)*

The DOE Hoisting and Rigging Technical Advisory Committee and the DOE Construction Safety Advisory Committee met on May 9–11, 2000, at the Energy Training Center in Albuquerque, New Mexico. These committees, both charted as Topical Committees under the DOE Technical Standards Program, serve to provide input to EH in the development of departmental policy in these two areas as well as to consolidate review and input on rulemaking efforts by OSHA and national consensus standards developed by ANSI. They also serve as an effective means of information exchange between hoisting and rigging and construction safety professionals from across the complex.

These committees have had coordinated meetings for the past several years as they share a significant number of common members and deal with a number of issues of common interest. This reduces travel for committee members, as many no longer need to travel to two separate annual meetings of these committees. It also facilitates communication between these committees as well as provides an opportunity for common professional development symposia between the two meetings. Between the two meetings, a half-day workshop on fall protection and scaffold safety, sponsored by Sandia National Laboratories, was conducted for members of both committees.

Among the significant agenda items for the Hoisting and Rigging Committee were proposals to modify *Hoisting and Rigging*, DOE-STD-1090-99, in the areas of qualifications and training for crane maintenance personnel, portable lifting devices, bridge crane load testing, and lifting rigged loads from the tines of forklifts. Primary agenda items for the Construction Safety Committee were analyzing skill of the craft for ISM verification, a review of the D&D activities at K-33, Oak Ridge, revise ANSI standard pertaining to fall protection in aerial lifts, and presentations of Type B accident investigations at Sandia and Lawrence Livermore National Laboratories. Minutes of these meetings will be available at these committees' respective Web sites found at: **http://tis-nt.eh.doe.gov/whs/TechComm/index.html**.

The Meteorology Topical Committee – Announcing a New Meteorology VCS

*By: Carl Mazzola, Chair, Meteorology Topical Committee (706-650-0939; **carl.mazzola@stoneweb.com**)*

On February 16, 2000, the DOE Meteorology Topical Committee (MTC) announced the approval of a new meteorology voluntary consensus standard (VCS), ANSI/ANS-3.11 (2000), *American National Standard for Determining Meteorological Information at Nuclear Facilities*. This new VCS was initiated in 1996 by a 30-member working group of subject matter experts (SMEs) in the atmospheric sciences (including members of the MTC) as a comprehensive meteorological data monitoring standard under auspices of the American Nuclear Society (ANS). Previously, neither a DOE-developed standard nor an applicable VCS were available to provide guidance to DOE meteorological programs. A nine-year-old technical guideline,

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Topical Committee Developments

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DOE/T-0173, provided limited guidance to the many comprehensive meteorological monitoring programs that exist at DOE sites, but it is not a standard and is outdated. ANSI/ANS-3.11 was developed to replace ANSI/ANS-2.5 (1984) and the meteorological part of DOE/EH-0173. Both the DOE Meteorological Coordinating Council (DMCC) and MTC have been actively involved in the development of this VCS and have determined that it is applicable to the existing meteorological programs at all DOE sites. Its guidance will benefit existing and future meteorological programs. However, VCSs are not mandatory unless they are specifically invoked in a requirements document such as a DOE Order, or until a contractor commits to use them in an implementation plan, a contract, or a set of "work smart" standards that are mutually agreed upon with DOE.

Chapter III, Section 3.a. (2), and Chapter IV, Section 4 of DOE Guide 252.1-1 provide general guidance on how VCSs can be used at DOE sites in lieu of developing a new DOE standard. Technical standards issued by recognized SDOs are acceptable for use at DOE facilities, consistent with policy and safety considerations. DOE policy strongly supports the use of VCSs to support its missions and functions.

Use It!: The MTC has reviewed this standard for applicability to and acceptability for DOE meteorological programs and recommends its use as an update or replacement for existing standards and guidance. The MTC also offers assistance to DOE meteorological program managers interested in the adoption and subsequent implementation of this new VCS.

About the MTC: The MTC is chartered under the DOE Technical Standards Program (TSP). Its roles are to coordinate meteorological standards-related issues for DOE and to facilitate interaction of DOE and DOE contractor personnel with counterparts in standards development organizations and other Federal agencies. As the need arises, the MTC will assist counterpart standards development organization topical committees (e.g., environmental restoration and radiological doses to biota) in the development and review of national and international technical standards. The MTC is chaired by Mr. Carl Mazzola, Certified Consulting Meteorologist, Stone & Webster Engineering Corporation. The MTC operates under the oversight of the DMCC, which is a technically-oriented coordinating group of DOE and DOE contractors associated with meteorological programs at more than 16 DOE facilities and national laboratories, and chaired by Darryl Randerson, DOE/NV.

With the commitment to use ANS-3.11, DOE meteorological programs will be based on a technical standard that will improve the standing of the program and perhaps its subsequent funding level. Moreover, ANS-3.11 will establish valid and comprehensive criteria for internal and external program appraisals. The MTC can work with the DMCC through its Assist Visit program to validate that each DOE site has acceptably applied this standard to its programmatic structure and to encourage the implementation of its principles in day-to-day operations.

Performance-Based Management Special Interest Group

The Performance-Based Management SIG – The PMB Handbook

*By: Will Artley, Coordinator, Performance-Based Management SIG (901-373-7493; **artleyw@orau.gov**)*

The Performance-Based Management (PMB) SIG is finishing its handbook on performance-based management. The following volumes have been completed and are posted on the PBM SIG Web site (**http://www.orau.gov/pbm**):

- Volume 2: *Establishing an Integrated Performance Measurement System*
- Volume 4: *Collecting Data to Assess Performance*
- Volume 5: *Analyzing and Reviewing Performance Data*
- Volume 6: *Using Performance Information to Drive Improvement.*

Volume 1: *Establishing and Maintaining a Performance-Based Management Program* and Volume 3: *Establishing Accountability for Performance*, will be published in the coming months. The handbook will be an excellent resource on performance-based management concepts, practices, and tools.

Biota Dose Assessment Committee – National and International Activities

*By: Stephen L. Domotor, Chair, Biota Dose Assessment Committee (202-586-0871; **Stephen.Domotor@eh.doe.gov**)*

Technical Standard being Prepared for Submission to DOE-TSP Review and Approval Process – The Core Team of the Biota Dose Assessment Committee (BDAC) is continuing its work to complete the *Graded Approach for Evaluating Radiation Doses to Aquatic and Terrestrial Biota*, Project ENVR-0011. The BDAC's goal is to submit this draft Technical Standard to the DOE Technical Standards Program for the formal review and approval process in late June 2000.

National and International Coordination and Outreach – The BDAC is continuing to respond to national and international interests regarding our biota dose evaluation methods development effort and the DOE Technical Standard on this topic. As an example, a BDAC representative recently participated in a meeting with the U.S. Environmental Protection Agency (EPA) and the Japanese firm METOCEAN Co. Ltd., which is conducting a study on "risk management for ecological conservation in the use of atomic energy," for the Nature Conservation Bureau (NCB), Environment Agency of Japan. The NCB is in charge of the protection of wildlife and is required to prepare preventative measures and risk management methodologies for wildlife against radiation contamination. The BDAC representative provided an overview of: (1) radiation effects data and dose standards for biota; (2) ecological concepts and principles for evaluating radiation as a "stressor" in eco-risk assessments; (3) relevant International Atomic Energy Agency (IAEA) activities in which DOE is involved; (4) DOE guidance on eco-risk

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Topical Committee Developments

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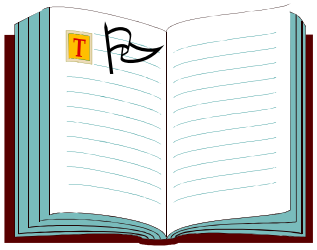
assessment and environmental monitoring; (5) DOE's Biota Dose Assessment Committee; and (6) DOE's draft technical standard which provides a graded approach for evaluating radiation doses to biota. The information was well-received. The meeting, hosted by EPA, provided opportunities for future coordination and partnerships between DOE and EPA regarding this issue.

Procedures Topical Committee – Supporting ISM



*By: Earl Carnes, Procedures Topical Committee (301-903-5255; **Earl.Carnes@hq.doe.gov**)*

The DOE's policy to implement Integrated Safety Management (ISM) is described in DOE P 450.4, *Safety Management System Policy*, as a standards-based systems approach that provides a framework to clearly describe how work is planned and performed consistent with statutory and contractual expectations for safety and quality. A focus on procedures is a critical next step in achieving an ISM culture in which work practices are defined for each ISM function with the full ownership and acceptance of all involved workers. Procedures link critical actions for planning and performing work and transmit the accumulated knowledge of effective work practices. They also provide a valuable mechanism for incorporating lessons learned and promoting continuous improvement. Confidence in the reliability of procedures depends on a sound, well-defined process for developing procedures that builds in both safety and effectiveness.

The DOE Procedures Topical Committee of the DOE Technical Standards Program was chartered to support the Department's evolving implementation of the Integrated Safety Management System (ISM) throughout DOE. Toward that goal, the Topical Committee is coordinating technical standards activities related to the development, management and use of procedures. The Committee facilitates the interaction of DOE and DOE contractor personnel who share common interests in the vital role that procedures play in fostering a standards-based safety culture and supporting the effective design and performance of work at all organizational levels. The scope of the Committee's interest encompasses all types of management and work performance procedures ranging from policy and program documents to floor level work instructions. Administrative, technical, program, maintenance, testing and emergency are examples of procedure types included within the Committee's purview.

Within the body of DOE's Guides and Technical Standards one document, DOE-STD-1029-92, *Writer's Guide for Technical Procedures*, addresses the preparation of procedures. This document was issued in 1992, prior to the development of ISM, and does not provide guidance on the application of the ISM principles and functions to the development, management, and use of procedures. The Steering Committee of the Procedures Topical Committee has identified a need to revise DOE-STD-1029-92 based on lessons learned and ISM and to develop two additional standards, one on Procedure Systems Management and one on Procedure Development. Qualified individuals who would like to become involved in the Procedures Topical Committee should contact their Technical Standards Manager for additional details.

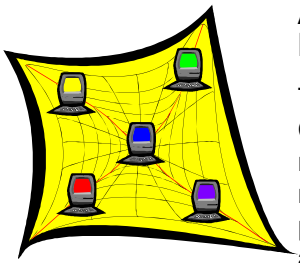
REVCOM – A Powerful Tool for On-line Interactive Document Development

A new web-based application for the interactive development of DOE Directives was demonstrated at the May 9–10, 2000, Technical Standards Program Meeting in Washington, D.C. The presentation, by Susan Hargrove and Ilir Angjeli of MA-4, was enthusiastically received by the attendees, who agreed that the Technical Standards Program (TSP) should investigate the development of a REVCOM version for use within the TSP.

The DOE Office of Management and Administration launched an initiative in 1997 to develop a directives review and comment system that would enable reviewers to provide comments directly on-line. A team effort was initiated involving representatives from the Department to design system specifications, perform four beta tests, market the system, and train users. Today, the new system, REVCOM, is available for Department-wide use. REVCOM is an on-line, user driven, highly interactive World Wide Web site that will allow users to make directive comments on-line, expedite the coordination and issue resolution process, and further eliminate paper and electronic attachments of drafts. REVCOM is the Department's single source for coordinating directives. Some of the key features of REVCOM are:

- Registrants are electronically notified that a document is available for review and comment.
- Comments are made directly on-line.
- Directives Points of Contact are made aware of the status of a directive.
- Comments are consolidated prior to submission.
- Deadlines are automated and must be met.
- An electronic matrix of comments is built into the system automatically.
- Comments and resolution can be viewed from the matrix of comments by registrants and writers.
- The amount of time a directive spends in draft status will be decreased.

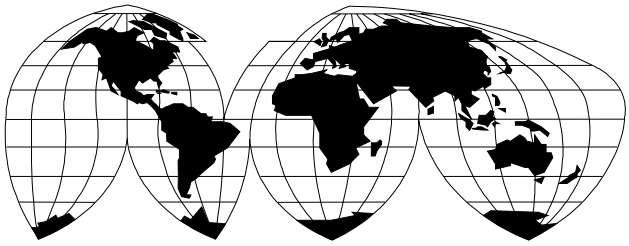
The site can be accessed through URL: **http://www.revcom.doe.gov**. User instructions can be obtained by clicking on the "Help" button. Please address all questions and comments pertaining to REVCOM to Susan M. Hargrove, Office of Management and Operations Support, MA-4, 202-586-4108, **Susan.Hargrove@hq.doe.gov**.



A New Face for the IEC Bulletin

The International Electrotechnical Commission (IEC) has renamed and redesigned its *IEC Bulletin* to give a new image that is associated with plans to transform the publication from a primarily paper-based medium to one that uses the Internet as its principal means for delivery. The new publication, *e-tech* (short for "electrotechnology"), will include an electronic bulletin board that will provide a forum for those wishing to comment on *e-tech* articles. The aim is to create a dialogue that will encourage readers to become more interactive with the IEC. The January/February 2000 issue focuses on renewable energies, highlighting the impact that standardization is having on water, solar, wind, and fuel cell energies. You may check out *e-tech* at: **http://www.iec.ch/etech-e.htm**. The *e-tech* editor, Dennis Brougham, may be contacted at: **db@iec.ch**.

The World of Standards



NEWS BRIEFS

ASTM Cooperation in MILSpec Conversion

An article entitled "MILSpec Conversion – The ASTM Way" in the March 2000 issue of *ASTM Standardization News* describes how the American Society for Testing and Materials (ASTM) assists in the ongoing conversion of military standards and specifications to ASTM standards. Timothy Brooke, a manager in the Technical Committee Operations Division of ASTM, outlines how the ASTM staff facilitates the conversion process by providing coordination and management services that include contacts with the appropriate ASTM committees and subcommittees and oversight of the total process. Documents such as the *Standardization Directory* and the *Department of Defense Index of Specifications and Standards* are used in this activity. ASTM plans to continue this support in order to assist DoD in its efforts to conform to the requirements of the National Technology Transfer and Advancement Act of 1995 and DoD's MILSpec Reform program.

ITU Joins MoU on Electronic Business in Support of E-commerce

(From a press release jointly issued by the ITU, IEC and UN/ECE)

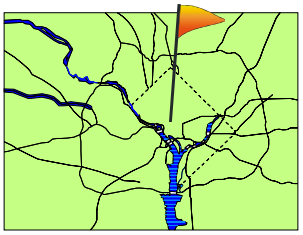
At a meeting in Geneva on March 24, 2000, the International Telecommunication Union (ITU) signed a Memorandum of Understanding (MoU) on electronic business, joining three leading international standards-setting organizations, the International Electrotechnical Commission (IEC), the International Organization for Standardization (ISO), and the United Nations Economic Commission for Europe (UN/ECE). In addition to the four signatories, Continuous Acquisition and Lifecycle Support (CALS) International and NATO CALS will participate in implementation of the MoU as registered international user groups. CALS is a strategic management concept that uses the best available information technology, management methods, and international standards to increase the effectiveness of organizations.

"The purpose of the MoU is to minimize the risk of divergent and competitive approaches to standardization, avoid duplication of efforts and avoid confusion amongst users," said Houlin Zhao, Director of ITU Telecommunication Standardization Bureau. "The MoU will also provide greater intersectoral coherence in the field of electronic business, an important step considering the uptake of e-commerce," Zhao added.

The MoU is designed to produce the mutually supportive standards required in business transactions (data interchange and interoperability) as well as products design and manufacturing to meet the urgent needs of both the industry and the end users.

The MoU is open to other international, regional, governmental, industry, and consumer organizations whose core mission involves standards-setting. For more information, contact Ms. Sophie Clivio, Technical Program Manager, ISO; +41-22-749-7284, Fax +41-22-749-7349, **clivio@iso.ch**.

New ANSI Headquarters



[From a March 1, 2000, press release made by the American National Standards Institute (ANSI)]

ANSI has opened new Headquarters in Washington, D.C. The new offices, located at 1819 L Street, NW, Sixth Floor, Washington, D.C. 20036 (202-293-8020, Fax: 202-293-9287) will house ANSI's President and Chief Executive Officer and ANSI staff supporting the Institute's conformity assessment, international policy, and public policy initiatives. The Institute's domestic and international standards facilitation programs and its administrative operations will remain principally in the New York City offices (11 West 42nd Street, New York, NY 10036, 212-642-4900; Fax: 212-398-0023). Dr. Mark W. Hurwitz, CAE, ANSI President and CEO, notes, "The Board of Directors' decision to relocate ANSI Headquarters to the nation's capital will enable us to work even more closely with U.S. public policy leaders. This strengthened link between the private and public sectors will greatly enhance the Institute's ability to focus on

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domestic, regional, and global issues in line with the Institute's mission. Our proximity to members and constituents in the Washington, D.C. area is critical to our ability to advance global trade, environmental, and safety and health issues." For more information check out ANSI's Web site at **http://web.ansi.org/public/news.html**.

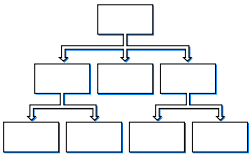
A New Report from ANSI

[From a press release made by the American National Standards Institute (ANSI)]

"Now is the time for the U.S. to intensify its focus on global markets," said Henry Line, Chairman of the ANSI International Committee and a Vice-Chairman of the ANSI Board of Directors, in his introduction to a new ANSI publication, the *Global Action Report*. The document, prepared by ANSI staff as a point-in-time view of activities impacting globalization of the marketplace, identifies recent trends, actions and accomplishments impacting the standardization and conformity assessment community.

Published in December 1999, the report identifies recent trends that have led to the introduction of new policies and procedures both domestically and globally; examines the current state of U.S. involvement and influence on international and regional standardization and conformity assessment activities; and reviews examples of successful U.S. influence in various industry sectors. The report contains chapters on global standardization, regional standards bodies, conformity assessment activities, and public policy initiatives; the focus is on those activities that are market-driven, add value, and protect the environment, safety, and health of society.

The *Global Action Report* is freely available in electronic format (PDF) from the ANSI Online Reference Library (**http://web.ansi.org/global_report/global_report.html**).



Probabilistic Risk Assessment

In an interview reported in the March 2000 issue of *Nuclear News*, George Apostolakis, MIT, describes the effect that the Probabilistic Rick Assessment (PRA) process is having on regulation in the nuclear industry. PRA is explained as a series of four steps in which (1) undesirable events are defined, (2) accident scenarios are detailed, (3) scenario probabilities are developed, and (4) accident sequences are ranked. The history of PRA in nuclear and other industries is discussed along with current domestic developments and international applications. Both the strengths and weaknesses of the process are considered, and a need for PRA standards is expressed. (Note: a standard on PRA development is being sponsored by the American Society for Mechanical Engineers.)

Nuclear News is a publication of the American Nuclear Society, Inc., 555 N. Kensington Ave, La Grange Park, Illinois.

NACLA Holds Its Second Annual Meeting

The National Cooperation for Laboratory Accreditation (NACLA) held its second Annual General Meeting (AGM) on April 10, 2000, at the National Institute of Standards and Technology (NIST) in Gaithersburg, Maryland. Principal speakers included Dr. Rich Kayser, NIST Director of Technology Services; John Donaldson, Vice President of ANSI; Donald Heirman, Lucent Technologies, NACLA President; Veronica de Solorzano, EMA (Mexican Accreditation Entity); and Don Wilson, Standards Council of Canada.

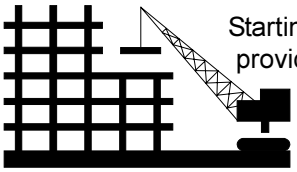
Dr. Kayser told the nearly 100 attendees at the AGM that NIST shares the same goal as NACLA: elimination of duplication and inefficiencies by creation of a coordinated and efficient U.S. system for the many organizations that accredit testing and calibration laboratories. "We believe NACLA has developed an effective process," said Dr. Kayser, "and we are confident that we can work with NACLA within this framework. We are currently holding discussions about the best way for NIST to support NACLA. I'm very optimistic that we will come up with some excellent mechanisms for providing that support."

Mr. Heirman and a number of the NACLA committee chairs presented an overview of NACLA's progress over the past year. NACLA evaluation teams have already evaluated two of the first four applicants, and the other two will be evaluated in the near future. Four other accrediting bodies are in various stages of the NACLA application process.

Ms. Solorzano and Mr. Wilson endorsed the NACLA program and described efforts to expand into a North American accreditation cooperation that would include all three NAFTA countries. The expansion would involve the North American Calibration Cooperation (NACC); further, the North American cooperation would aim to link with the Inter-American Accreditation Cooperation (IAAC).

For more information on the NACLA, check out the Web site at: **http://ts.nist.gov/ts/htdocs/210/nacla/index.htm**.

A New Resource on Construction Safety and Health



Starting in August 2000, a new Web site provided by the Electronic Library of Construction Safety and Health (eLCOSH) will provide a wide range of materials on construction safety and health. The goal is to improve safety and health for construction workers by making such information easier to obtain than in the past.

Workers, contractors, researchers, and others will be able to download information from a broad range of sources—in English, Spanish, and other languages. The materials will include: pocket cards, brochures, how-to manuals, chart books, newsletters, research reports, directories, training manuals and

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Welcome Aboard!

The Technical Standards Managers (TSMs) are the backbone of the DOE Technical Standards Program! These knowledgeable individuals serve as their organization's standards point of contact and contribute to the coordination of Department-wide TSP activities. A great deal of their work time is spent in assuring that standards activities take place in a manner that will promote safe, economical, and efficient operations locally and across the DOE complex.

With nearly 70 active and mobile people involved in TSM activities, it can be a daunting task just to keep up with the retirements and reassignments affecting the TSM roster. This "Welcome Aboard" feature is designed to introduce you to the new TSMs and help you keep abreast of the rapidly changing makeup of the Technical Standards Managers' Committee (TSMC).

The TSMC welcomes the following recently added member.

Jill K. Nagode
Rocky Flats Office
10808 Highway 93, Unit A
P.O. Box 928
Golden, CO 80403
Phone: 303-966-9659
Fax: 303-966-4763
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overheads, data sets, bibliographies, regulations, and summaries of CD-ROMs and videos (and where to get them).

Postings will emphasize items that apply directly to construction safety and health. eLCOSH will provide links to related Web sites.

For further information, or if you have an item that would be appropriate for eLCOSH, please contact CPWR at **cpwr@cpwr.com**, 202-962-8490, Fax 202-962-8499. The mailing address is: eLCOSH, c/o CPWR, 5th Floor, 111 Massachusetts Ave. NW, Washington, D.C. 20001.

Answers to Frequently Asked Questions

Question: Specifically, what does the term "superseded" mean when applied to DOE Technical Standards?

Answer: The term "superseded" is used in the Technical Standards Program (TSP) "Project Registration Number Assignments" (a listing of TSP Projects) to indicate DOE Technical Standards that have been replaced either by (1) a new revision (new year designation) of the document (same title and number) or (2) a different document with a different title and number. The replacement document is designated on the cover as "Superseding" the document being replaced. This terminology has no effect on earlier versions of documents that are referenced in currently active contractual agreements. While the superseded document is no longer approved for referencing in new documents or contracts, it is still valid as referenced in contracts that were agreed upon when the older version was in effect. Superseded DOE Technical Standards are removed from the TSP Home Page and are considered inactive.

Question: Where can I find information on the correct format for the cover of DOE Technical Standards?

Answer: Refer to the TSP Style Guide (**http://tis.eh.doe.gov/techstds/tspofram.html**), pages 3 and 15. An updated Style Guide will be available on the TSP Web Site in the near future.

Question: I understand that there is a change in the format for document headers and the cover date that is not covered in the current Style Guide. What is new that I need to know?

Answer: Now that we are in the year 2000, we are using the full year in the page headers and cover date. For example, DOE-STD-XXXX-2000.

Standards Forum

Editor ..... Marty Marchbanks

Distribution: If you would like to have your name added to (or removed from) the Technical Standards Program mailing list, or you need to make an address change, please notify Marty Marchbanks, Oak Ridge National Laboratory (ORNL), 865-241-3658; Fax: 865-574-0382; e-mail: **marchbanksmf@ornl.gov**.

Comments: If you have any questions or comments please contact Rick Serbu, EH-31, 301-903-2856; e-mail: **Richard.Serbu@eh.doe.gov**. If you have any questions or comments on DOE standards projects, please call Don Williams, ORNL, 865-574-8710; e-mail: **williamsdljr@ornl.gov**.

Publication: ORNL and DOE's ES&H Technical Information Services posts *The Standards Forum* quarterly for the DOE Technical Standards Program at **http://tis.eh.doe.gov/techstds/**.

Upcoming Meetings

June 25–28, 2000

American Society of Safety Engineers Conference and Exposition

Orange County Convention Center – Orlando, Florida

More than 80 educational sessions on manufacturing, transportation, healthcare, leadership, environment, health and safety management, and more. More than 300 exhibitors showcase the latest in safety, health and environmental products and services. For more information, check out the conference home page, **http://www.asse.org/aorlan.htm**.

July 17–20, 2000

The Sixth Nuclear Regulatory Commission/American Society of Mechanical Engineers Symposium on Valve and Pump Testing

Hyatt Regency Washington – 400 New Jersey Avenue, NW, Washington, D.C.

An exchange of information on technical, programmatic, and regulatory issues associated with the testing of valves and pumps used in nuclear power plants.

For more information, contact Thomas G. Scarbrough, 301-415-2794, **tgs@nrc.gov**.

July 23–26, 2000

International Joint Power Generation Conference & Exposition (IJPGC&E)

Sheraton Bal Harbour – Miami Beach, Florida

Sponsored by ASME's Power, Nuclear and Fuels and Combustions Technologies Divisions, this meeting is widely regarded as one of the power industry's most technically acclaimed events.

For more information, see **http://www.asme.org/events/**.

July 23–27, 2000

2000 ASME Pressure Vessels and Piping Conference

The Westin Hotel – Seattle, Washington

Theme: *A Century of Progress in PVP Technology*

More than 150 paper and panel sessions are planned as well as tutorials, NDE, and software demonstrations. The ASME Pressure Vessels and Piping Division will sponsor this Conference with participation by the ASME NDE Division.

The Web site at **http://www.asme.org/conf/confers.html** has more information.

August 14–15, 2000

Standards Engineering Society Annual Conference

Holiday Inn Inner Harbor – Baltimore, Maryland

Theme: *Standards for Change and Stability*

The keynote address will be delivered by Mark W. Hurwitz, President & CEO, American National Standards Institute. Six sessions will focus on: trends in standardization (developing, distributing, and funding the process); conformity assessment; the globalization of standards and related issues; government standards initiatives and their influence; the role of training and education in a competitive standards world; and a technology update that considers standards development, access, and the way organizations do business.

For more information, check out the conference Web site at: **http://www.ses-standards.org/conference.html**.

October 18, 2000

2000 World Standards Day Celebration

Washington, D.C.

World Standards Day is a celebration of the voluntary consensus standards system. A number of activities and events showcase the standards and conformity assessment participation of individuals from around the globe.

For more information, contact Jane Schweiker, American National Standards Institute, **jschweik@ansi.org**, 301-469-3363.

November 5–10, 2000

International Mechanical Engineering Congress and Exposition

Walt Disney World Dolphin – Orlando, Florida

Theme: *Beyond Traditional Boundaries*

In support of the theme, the International Congress Committee will sponsor a highlight topic symposium. This symposium will consist of four panel discussions, one each day, Monday through Thursday.

For more information, check the congress Web site at: **http://www.asme.org/conf/congress00/**.

November 12–17, 2000

2000 American Nuclear Society International Meeting

Marriott Wardman Park Hotel – Washington, D.C.

Embedded Topical Meetings: "Best-Estimate" Methods in Nuclear Installation Safety Analysis; Nuclear Plant Instrumentation and Control & Human Interface Technologies; Nuclear Applications of Accelerator Technology

Check out the Web site at **http://www.ans.org/meetings/**.